

CHAPTER 6: SCAG 2030 Preferred Aviation Plan Overview

The SCAG Region has 57 public use airports, including six commercial service airports, 45 general aviation, two recently closed military air bases (one certified as a commercial service airport), two commuter airports and two joint-use facilities.

In all, some 78 million annual passengers (MAP) were served in the Region in 2002, almost double the number served in 1980. The level of air passenger demand is forecast to double again before 2030. While none of the individual airports is the largest in the U.S., the Region's airports taken together make Southern California the busiest of all regions in the country

There are eight airport governing bodies responsible for planning their individual airports in the proposed ten commercial airport system. These airports are:

| | |
|------------------------------------|---------------------------------------|
| • Burbank Glendale Pasadena (BUR) | • Ontario International (ONT)* |
| • John Wayne (SNA) | • Palm Springs (PSP) |
| • Los Angeles International (LAX)* | • Palmdale Regional (PMD)* |
| • Long Beach (LGB) | • San Bernardino International (SBD) |
| • March Inland Port (MAR) | • Southern California Logistics (SCL) |

**Operated by Los Angeles World Airports*

Air Passengers

Currently, six active commercial service airports handle the majority of passenger air traffic: Burbank, John Wayne/Orange County, Long Beach, Los Angeles International, Ontario International and Palm Springs. Limited commercial service exists at Oxnard and Imperial County airports. Passengers are currently concentrated at the urban airports with LAX serving almost 72 percent of the regional total. This air service concentration at LAX creates severe airport ground access problems. With worsening highway congestion in the future, LAX will become increasingly difficult to access for international passengers and air cargo.

Both the recent recession and the impacts of September 11, 2001 (9/11) are still being felt in the aviation industry. The terrorist acts fundamentally changed the way airports think about security and safety, while the recession changed the way business travelers purchased air travel. After 9/11 the number of regional air travelers dropped dramatically. Starting in 2002 airports in the region started to show signs of recovery. Smaller regional airports like Burbank, Ontario and John Wayne are almost at, or have exceeded, pre-9/11 passenger numbers. LAX has still not completely recovered. International travel suffered the greatest from 9/11 and more recently the SARS outbreak. These events have slowed passenger activity at LAX.

Table 6-1: Historical Annual Passengers (In Millions)

| | <i>1975</i> | <i>1980</i> | <i>1985</i> | <i>1990</i> | <i>1995</i> | <i>2000</i> | <i>2002</i> |
|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Burbank | 1.6 | 1.9 | 2.9 | 3.5 | 5.0 | 4.8 | 4.6 |
| John Wayne | 1.8 | 2.4 | 3.3 | 4.6 | 7.2 | 7.8 | 7.9 |
| Long Beach | 0.3 | 0.2 | 1.1 | 1.5 | 0.4 | 0.6 | 1.5 |
| Los Angeles | 23.7 | 33.0 | 36.3 | 45.9 | 53.9 | 67.7 | 56.2 |
| Ontario | 1.3 | 2.0 | 3.6 | 5.4 | 6.4 | 6.7 | 6.5 |
| Palm Springs | 0.3 | 0.5 | 0.6 | 0.9 | 0.9 | 1.3 | 1.1 |
| Total | 29.1 | 40.0 | 47.8 | 61.8 | 73.9 | 88.9 | 77.8 |

Air Cargo

Airports play an important role in goods movement, as air cargo is transported in either passenger aircraft belly-holds or in dedicated freight aircraft used primarily for high value, time sensitive shipments. In 2002, regional airports handled 2.6 million tons of air cargo.

Regional Air cargo has grown at an average annual rate of 6.6% since 1965. Los Angeles International and Ontario International are the major cargo handling airports, transporting about 96 percent of all regional air cargo, with LAX alone accounting for 75 percent of the traffic. Ontario Air Cargo traffic has increased by seven times since 1979, while LAX has doubled in the same period. Burbank, John Wayne and Long Beach handle substantially less cargo.

Table 6-2: Historical Air Cargo Tonnage (x 000)

| | <i>1975</i> | <i>1980</i> | <i>1985</i> | <i>1990</i> | <i>1995</i> | <i>2000</i> | <i>2002</i> |
|--------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|
| Burbank | 0 | 0 | 7 | 20 | 36 | 37 | 43 |
| John Wayne | 0 | 0 | 0 | 0 | 16 | 18 | 15 |
| Long Beach | 0 | 1 | 4 | 19 | 27 | 52 | 59 |
| Los Angeles | 715 | 882 | 929 | 1,284 | 1,761 | 2,249 | 1,959 |
| Ontario | 3 | 5 | 176 | 246 | 387 | 511 | 547 |
| Palm Springs | 0 | 0 | 0 | 0.4 | 0.2 | 0.1 | 0.1 |
| Total | 718 | 887 | 1,116 | 1,570 | 2,227 | 2,867 | 2,623 |

Los Angeles International Airport (LAX) functions as the primary cargo airport. Cargo facilities operated by airlines and cargo shippers occupy two million square feet of building space on about 200 acres of land. The total land area of LAX (including parking) is 3,500 acres. A significant number of off-airport freight forwarding facilities are also located in proximity to the airport. The majority of air cargo passes through LAX primarily because shippers are able to rely on commercial passenger air carriers for spot or contracted cargo transport. Approximately 38% of LAX air cargo is carried in the bellies of passenger aircraft, part of a gradual decline as more cargo is moved to dedicated air freighters, which currently account for 62% of LAX air freight.

However, because of the large number of cities served by passenger airlines out of LAX, cargo shippers are able to offer worldwide service without necessarily having to operate dedicated freighters.

Ontario International Airport (ONT) handled 21% of regional air cargo in 2002. Owned by the City of Los Angeles and operated by LAWA, ONT occupies 1,463 acres and is well situated within the regional ground transportation system. UPS operates and express package service hub out of ONT. Ninety-eight percent of air cargo is handled through dedicated air freighters.

Other regional airports with existing air cargo service include Burbank, John Wayne, Long Beach and Palm Springs. All serve minor amounts of air cargo.

The air cargo industry was significantly impacted by the 2001 terrorist attacks. The Transportation Security Administration (TSA) mandated that U.S. mail over 16 ounces could no longer be carried in the belly compartments of passenger aircraft. This restriction, as well as a recent tightening of the "known shipper" requirement, has limited the amount of air cargo carried on passenger aircraft.

Another key issue is surface congestion. With the majority of regional air cargo only served by two airports, the ability of the already crowded surface transportation infrastructure to accommodate air cargo demand is limited. To complicate matters, the San Diego region sends two thirds of its air cargo to SCAG regional airports for shipping. Orange County, which generates 30% of regional air cargo, serves less than three percent of this amount.

The impact on ground transportation of freight movement to and from the airports is significant. The focus of new airports such as March, Southern California Logistics and San Bernardino International on initially serving freight helps to relieve the pressure on LAX and Ontario and serve the goal of decentralizing regional air services.

More than 70% of all regional air cargo is now shipped on dedicated freighter aircraft, as compared to 59% in 1994. The continuing shift of cargo from the belly

holds of passenger planes to dedicated all cargo freighters has enhanced the ability of these airports to serve cargo.

FORECASTS

Passenger Aviation

Despite the recent downturn in air traffic, urban airports should reach their physical or legal capacity within the forecast period. The airports are all encroached and have little room to expand without generating significant environmental impacts and community opposition. While the urban airports are all constrained, the suburban airports all have capacity, which is available to serve projected regional growth in demand.

The economic costs of doing nothing are substantial. For every one million regional air passengers, it is estimated that there is a positive regional economic impact of \$620 million (in 1998 dollars) and 4,475 jobs. SCAG estimates that under a fully constrained aviation system, only 141 million passengers would be served in 2030.

SCAG has updated its regional growth forecast and has developed a new aviation demand forecast and plan that maximizes airport efficiency on a regional scale. The new aviation plan is termed the "Preferred Aviation Plan." Under the plan, there is a forecast regional demand of 170 million passengers in 2030, which results in an economic benefit of \$18 Billion and 131,000 jobs over a constrained system.

Table 6-3: 2002 Air and the 2030 Preferred Aviation Plan

| | <i>BUR</i> | <i>JWA</i> | <i>LAX</i> | <i>LGB</i> | <i>MAR</i> ¹ | <i>ONT</i> | <i>PSP</i> | <i>PMD</i> | <i>SBD</i> | <i>SCI</i> | <i>TOTAL</i> |
|---------------------------------------|-------------|-------------|-------------|------------|-------------------------|-------------|------------|-------------|------------|------------|--------------|
| Existing Conditions (2002) | 4.6 | 7.9 | 56.2 | 1.4 | 0 | 6.5 | 1.1 | 0 | 0 | 0 | 77.8 |
| Preferred Aviation Plan (2030) | 10.7 | 10.8 | 78.0 | 3.8 | 8.0 | 30.0 | 3.2 | 12.8 | 8.7 | 4.0 | 170.0 |

¹ Air Force Reserve Activity at March is projected to remain at 51,426 annual operations. The primary objective of the commercial airport is cargo operations. SCAG projections assume commercial passenger service not yet contemplated by the March Joint Powers Commission. SCAG has a long standing policy to give priority to military and national defense needs

Under the Preferred Aviation Plan the future demand for air travel will be largely served by using available capacity at airfields located in the Inland Empire and north Los Angeles County where projected population growth will be best served, rather than relying on expanding existing urban airports. Cooperation between airport authorities is necessary to ensure efficient usage of capacity. Using this available capacity promotes a decentralized system that relieves pressure on constrained, urbanized airports and on the region's surface transportation infrastructure.

The Preferred Aviation Plan attempts to distribute long haul and international service to suburban airports, particularly Palmdale. With international service established at Palmdale and Ontario airports, the region would have a balanced system of three international airports, similar to the San Francisco Bay Area and New York regions. The Preferred Aviation Plan incorporates the proposed MAGLEV system, which will strategically connect the major airports and augment a balanced distribution of aviation demand and services in the region.

The 170 total MAP served by the Preferred Aviation Plan in 2030 is slightly higher than the 167.3 MAP that was forecast by the 2001 adopted aviation plan by 2025. Given a lower aviation demand forecast resulting from the events of September 11 2001, and the recent economic downturn, it can be concluded that the new assumptions and concepts incorporated into the Preferred Aviation Plan alleviates the substantial loss of capacity associated with eliminating El Toro from the regional system.

Table 6-4: Preferred Aviation Plan Economic Impact

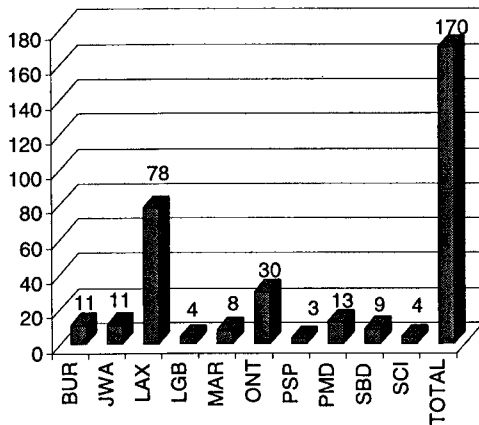
| Variation | Passengers (Millions) | Economic Impact (1998 Dollars) | Jobs | Economic Benefit (compared to Constrained) |
|------------------------------------|----------------------------------|-----------------------------------------------|----------------|-----------------------------------------------------------|
| Constrained | 140.8 | \$ 87 Billion | 630,000 | ----- |
| Preferred Aviation Plan | 170.0 | \$105 Billion | 761,000 | \$18 Billion / 131,000 Jobs |
| Fully Unconstrained | 192.0 | \$119 Billion | 859,000 | \$32 Billion / 229,000 Jobs |

Under SCAG's Preferred Aviation Plan, air cargo becomes more decentralized. LAX, while serving greater amounts of air cargo, drops from handling 75% of regional air cargo to 27%. Ontario airports air cargo-handling jumps from 21% to nearly 26%. Other airports in Palmdale and the Inland Empire go from serving no air cargo to serving a combined 44%.

Table 6-5: Air Cargo Demand 2030
Preferred Aviation Plan
(Thousands of Tons of Air Cargo)

| | 2002 | | 2030 | |
|--------------|-----------------------|-----------------------------|-----------------------|-----------------------------|
| | <i>Tons x 000</i> | <i>Percent of total</i> | <i>Tons x 000</i> | <i>Percent of total</i> |
| BUR | 43 | 1.6% | 87 | 1.0% |
| JWA | 15 | 0.6% | 43 | 0.5% |
| LAX | 1,958 | 74.7% | 2,340 | 26.8% |
| LGB | 58 | 2.2% | 137 | 1.6% |
| MAR | 0 | 0.00% | 1,117 | 12.8% |
| ONT | 547 | 20.9% | 2,252 | 25.8% |
| PSP | 0.8 | 0.03% | 128 | 1.5% |
| PMD | 0 | 0.0% | 1,024 | 11.7% |
| SBD | 0 | 0.0% | 1,092 | 12.5% |
| SCI | 0 | 0.0% | 504 | 5.8% |
| TOTAL | 2,623 | 100% | 8,724 | 100 % |

2030 Air Passengers (in Millions)



2030 Air Cargo (in Thousands of Tons)

